CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER: 75-224

APPROVED DRAFT LABELING

50 mL NDC 51672-1293-3

Clobetasol Propionate Topical Solution USP, 0.05%

FOR USE ON THE SCALP.
FOR EXTERNAL USE ONLY.
NOT FOR OPHTHALMIC USE.

CONTAINS: Clobetasol propionate 0.05% $(0.5\ mg/g)$ in a base composed of purified water, isopropyl alcohol (39.3%), carbomer 934P, and sodium hydroxide.

USUAL DOSABE: See package insert for full prescribing infor-

Store in tight containers.

Store at controlled room temperature 15*-30°C (59*-86*F)

Do not refrigerate.

Do not use near an open flame.

See bottom for lot number and expiration date.

Keep this and all medication out of the reach of children.

Mfd. By: Taro Pharmaceuticals Inc. Bramalea. Ontario, Canada L6T 1C3 Dist. By: Tare Pharmaceuticals U.S.A., Inc. Hawthome; NY 10532 Made in Canada.

Rx only

TARO

%50.0 ,42U Topical Solution Clobetasol Propionate 50 mL CONTAINS: Clobetasoi propi-50 mL onate 0.05% (0.5 mg/g) in a Mtd. By: Taro Pharmaceuticals Inc. NDC 51672-1293-3 NDC 51672-1293-3 base composed of purified Bramalea, Ontario, Canada L6T 1C3 water, isopropyl alcohol (39.3%), carbomer 934P, and Dist. By: Taro Pharmacouticals U.S.A., Inc. sodium hydroxide. Hawthorne, NY 10532 USUAL DOSAGE: See package Clobetasol Clobetasol insert for full prescribing infor-Made in Canada. **Propionate Propionate** For lot number and expiration date see box flap or bottom of bottle. **Topical Topical** Store in tight containers. Store at controlled room temperature 15°.30°C 59°-86°F).

Do not refrigerate.

Do not use near an open liame. Solution USP, Solution USP, 0.05% 0.05% Keep this and all medication out of the reach of children. NOV 1 6 1990 TARO TARO FOR USE ON THE SCALP. FOR USE ON THE SCALP. FOR EXTERNAL USE ONLY. FOR EXTERNAL USE ONLY. NOT FOR OPHTHALMIC USE. NOT FOR OPHTHALMIC USE. Rx only **Rx** only PK-2507-0 M000

, ;

=:::

F. ..

•

DESCRIPTION: Clobetasol Propionate Topical Solution USP, 0.05% contains the active compound clobetasol propionate, a synthetic corticosteroid, for topical dermatologic use. Clobetasol an analog of prednisolone, has a high degree of glucocorticoid activity and a slight degree of mineralocorticoid activity.

Chemically, clobetasol propionate is 21-chloro-9-fluoro-11β, 17-dihydiexy-16β-methylpregna-

1,4-diene-3,20-dione 17-propionate, and it has the following structural formula:

Clobetasol propionate has the molecular formula $C_mH_mCIFO_q$ and a molecular weight of 466.98. It is a white to cream-colored crystalline powder insoluble in water.

Clobetasol propionate topical solution contains clobetasol propionate 0.5 mg/g in a base composed of purified water, isopropyl alcohol (39.3%), carbomer 934P, and sodium hydroxide.

CLINICAL PHARMACOLOGY: The corticosteroids are a class of compounds comprising steroid hormones secreted by the adrenal cortex and their synthetic analogs. In pharmecologic doses, corticosteroids are used primarily for their anti-inflammatory and/or immunosuppressive effects. Topical corticosteroids such as clobetasol propionate are effective in the treatment of corticosteroid-responsive dermatoses primarily because of their anti-inflammatory, antipruril-ic, and vasoconstrictive actions. However, while the physiologic, pharmacologic, and clinical affects of the corticosteroids are well known, the exact mechanisms of their actions in each dis-

Cinhetesol omnionate a corticosteroid, has been shown to have topical (dermatologic) and systemic pharmacologic and metabolic effects characteristic of this class of drugs.

Pharmacoldnetics: The extent of percutaneous absorption of topical corticosteroids, including ciobetasol propionate is determined by many factors, including the vehicle, the integrity of the epidermal barrier, and the use of occlusive dressings (see DOSAGE AND ADMINISTRATION). As with all topical corticosteroids, clobetasol propionate can be absorbed from normal intact

skin. Inflammation end/or other disease processes in the skin may increase percurate out to skin may increase percurate out to skin may increase percurate out absorption. Occlusive dressings substantially increase the percuraneous absorption of topical controcsteroids (see DOSAGE AND ADMINISTRATION).

Once absorbed through the skin. topical controcsteroids enter pharmacokinetic pathways sim-

ilarly to systemically administered corticosteroids. Corticosteroids are bound to plasma proteins in varying degrees. Corticosteroids are metabolized primarily in the liver and are then excreted by the kidneys. Some of the topical confloateroids, including clobetasol propionate and its metabolites, are also excreted into the bile.

Following repeated nonocclusive application in the treatment of scalp psoriasis, there is some evidence that clobetasol propionate topical solution has the potential to depress plasma corti-sol levels in some patients. However, hypothalamic-pituitary-adrenal (HPA) axis effects pro-duced by systemically absorbed clobetasol propionate have been shown to be transient and reversible upon completion of a two-week course of treatment.

INDICATIONS AND USAGE: Clobetasol propionate topical solution is indicated for short-term topical treatment of inflammatory and pruritic manifestations of moderate to severe corticos-teroid-responsive dermatoses of the scalp, Treatment beyond 2 consecutive weeks is not recommended, and the total dosage should not exceed 50 ml, per week because of the potential for the drug to suppress the HPA axis.

This product is not recommended for use in children under 12 years of soe

CONTRAINDICATIONS: Clobetasci propionate topical actution is contraindicated in patients with primary infections of the scalp, or in patients who are hypersensitive to clobetasci propionate, other corticosteroids, or any ingredient in this preparation.

PRECAUTIONS.

General: Clobetasol propionate le a highly potent topical corticosteroid that has been shown to suppress the HPA axis at doses as low as 2 g (of oliviment) per day. Systemic absorption of topical corticosteroids has resulted in reversible HPA axis suppression, manifes-

tations of Cushing's syndrome, hyperglycemia, and glucosuria in some patients.

Conditions that augment systemic absorption include the application of the more potent conteroids, use over large surface areas, prolonged use, and the addition of occlusive dr ings. Therefore, patients receiving a large dose of a potent topical stancid applied to a large sur-face area should be evaluated periodically for evidence of HPA axis suppression by using the urinary free contisol and ACTH stimulation tests. If HPA axis suppression is noted, an attempt should be made to withdraw the drug, to reduce the frequency of application, or to sub less potent steroid.

Recovery of HPA axis function is generally prompt and complete upon discontinuation of the drug, infrequently, signs and symptoms of steroid withdrawal may occur, requiring supplemen-tal systemic corticosteroids.

Children may absorb proportionally larger amounts of topical contionsteroids and thus be more susceptible to systemic toxicity (see PRECAUTIONS: Pediatric Use).
 If Intration develops, topical conticosteroids should be discontinued and appropriate therapy

instituted. Irritation is possible if clobetasot propionate topical solution contacts the eye. If that

should occur, immediate flushing of the eye with a large volume of water is recommended.

If the inflammatory lesion becomes infected, the use of an appropriate antifungal or antibs terial agent should be instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled.

Although diobetasol propionate topical solution is intended for the treatment of inflammato conditions of the scalp, it should be noted that certain areas of the body, such as the face, groin, and axillae, are more prone to atrophic changes than other areas of the body following treatment with corticosteroids. Frequent observation of the patient is important if these areas are to be treated.

As with other potent topical conficesteroids, clobetasol propionate topical solution should not be used in the treatment of rosacea and perioral dermatitis. Topical conticosteroids in general should not be used in the treatment of sone or as sole therapy in widespread plaque psoriasis. Information for Patients: Patients using clobetasol propionate topical solution should receive the following information and instructions:

- This medication is to be used as directed by the physician and should not be used longer than the preactibed time period. It is for external use only. Avoid contact with the eyes.
- 2. This medication should not be used for any disorder other than that for which it was prescribed.
- 3. The treated skin area should not be bandaged or otherwise covered or wrapped so as to be occlusive.
- Patients should report any signs of local adverse reactions to the physician.
 Laboratory Tests; The following tests may be helpful in evaluating HPA axis suppression:

Urinary free cortisol test ACTH stimulation test

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term animal studies have not been performed to evaluate the carcinogenic potential or the effect on fertility of topical conti-

Studies to determine mutagenicity with prednisolone have revealed negative results. Pregnancy: Teratogenic Effects: Pregnancy Category C: The more potent conticesteroids have been shown to be teratogenic in animals after dermal application. Clobetasol propionate has not been tested for teratogenicity by this route; however, it is absorbed percutaneously, and when administered subcutaneously it was a significant teratogen in both the rabbit and the mouse. Clobetasol propionate has greater teratogenic potential than steroids that are less potent

There are no adequate and well-controlled studies of the teratogenic effects of topically applied controsteroids, including clobetasol, in pregnant women. Therefore clobetasol and other topical controsteroids should be used during pregnancy only if the potential benefit justi-fies the potential risk to the fetus, and they should not be used extensively on pregnant patients,

in large amounts, or for prolonged periods of time.

Numsing Mothers: It is not known whether topical administration of conticosteroids could result in sufficient systemic absorption to produce detectable quantities in breast milk. Systemically administered conficusteroids are secreted into breast milk in quantities not likely to have a deleterious effect on the infant. Nevertheless, caution should be exercised when topical corticoeteroids are prescribed for a nursing woman.

Pediatric Use: Use of clobetasol propionate topical solution in children under 12 years of age is not recommended.

Pediatric patients may demonstrate greater susceptibility to topical corticosteroidinduced HPA axis suppression and Cushing's syndrome than mature patients because of a terger skiin surface area to body weight ratio.

HPA axis suppression, Cushing's syndrome, and intracranial hypertension have been report-

ed in children receiving topical conticosteroids. Manifestations of adrenal suppression in children include linear growth retardation, delayed weight gain, low plasma contsol levels, and absence of response to ACTH stimulation. Manifestations of intracranial hypertension include bulging fontanelles, headaches, and bilateral papilledems.

ADVERSE REACTIONS: Clobstasol propionate topical solution is generally well tolerated when used for 2-week treatment periods.

The most frequent adverse events reported for clobetasol propionate topical solution have been local and have included burning and/or stinging sensation, which occurred in approximately 10% of the patients; scalp pustules, which occurred in approximately 1% of the patients; and tingling and folliculitis, each of which occurred in 0.7% of the patients. Less frequent nts were itching and tightness of the scalp, dermatitis, tend loss, and eve initiation.

The following local adverse reactions are reported infrequently when topical corticosters are used as recommended. These reactions are listed in an approximately decreasing order of occurrence: burning, itching, inflation, dryness, foliculitis, hypertrichosis, acnelform eruptions, hypopigmentation, perioral dermatitis, allergic contact dermatitis, maceration of the strin, sec-ondary infection, strin atrophy, strine, and miliaria. Systemic absorption of topical corticosteroids has produced reversible HPA axis suppression, manifestations of Cushing's syndrome, hyper-glycemia, and glucosuria in some patients, in rare instances, treatment (or withdrawal of treatment) of psoriasis with conficosteroids is thought to have exacerbated the disease or provoked the pustular form of the classes, so careful patient supervision is recommended.

OVERDOSAGE: Topically applied clobetasol propionate solution can be absorbed in sufficient amounts to produce systemic effects (see PRECAUTIONS).

DOSAGE AND ADMINISTRATION: Clobetasol Propionate Topical Solution USP, 0.05% should be applied to the affected scalp areas twice daily, once in the morning and once at night.

Clobetasol propionate topical solution is potent, therefore, treatment must be limited consecutive weeks, and amounts greater than 50 mL per week should not be used. Clobetasol propionate topical solution is not to be used with occlusive dressings

HOW, SUPPLIED: Clobetasol Propionate Topical Solution USP, 0.05% is supplied in plastic squeeze bottles, 25 mL and 50 mL

Store in tight or rs. Store at controlled room temperature 15"-30" (59"-85"F). Do not refrigerate. Do not use near an open flame.

Rx only.

Mfd. bv: Taro Pharmaceuticals Inc., Bramaiea, Ontario LST 1C3

Issued: February 1998

PK-2508-0

Clobetasol Propionate Topical Solution USP, 0.05%

(Potency expressed as clobetasol propionate.) For Topical Use. Not for Ophthalmic Use.

PK-2508-0

į

DESCRIPTION: Clobetasol Propionate Topical Solution USP, 0.05% contains the active compound diobetasol propionate, a synthetic corticosteroid, for topical dermatologic use. Ctobetasol an analog of prednisolone, has a high degree of glucocorticoid activity and a slight degree of mineralocorticoid activity.

Chemically, clobetasol propionate is 21-chloro-9-fluoro-11ß, 17-dihydroxy-18ß-methylpregna-1,4-diene-3,20-dione 17-propionate, and it has the following structural formula:

Clobetasci propionate has the molecular formula $C_{19}H_{12}\text{CIFO}_6$ and a molecular weight of 468,98. It is a white to cream-colored crystalline powder insoluble in water.

Clobetasol propionate topical solution contains clobetasol propionate 0.5 mg/g in a base composed of purified water, isopropyl alcohol (39.3%), carborner 934P, and sodium hydroxide.

CLINICAL PHARMACOLOGY: The corticosteroids are a class of compounds comprising steroid hormones secreted by the adrenal cortex and their synthetic analogs, in pharmacologic doses, contcosteroids are used primarily for their anti-inflammatory and/or immunosuppressive effects. Topical conticosteroids such as clobetasol propionate are effective in the treatment of corticostaroid-responsive dermatoses primarily because of their anti-inflammatory, antiprurit-ic, and vasoconstrictive actions. However, while the physiologic, pharmacologic, and clinical effects of the conticosteroids are well known, the exact mechanisms of their actions in each disease are uncertain.

Clobetasol propionate, a controsteroid, has been shown to have topical (dermatologic) and systemic pharmacologic and metabolic effects characteristic of this class of drugs. Pharmacolthretics: The extent of percutaneous absorption of topical conficeteroids, including clobetased propionate is determined by many factors, including the vehicle, the integrity of the epidermal barrier, and the use of occlusive dressings (see DOSAGE AND ADMINISTRATION). As with all topical conficeteroids, clobetased propionate can be absorbed from normal intact

skin, Inflammation and/or other disease processes in the skin may increase percutaneous absorption. Occlusive dressings substantially increase the percutaneous absorption of topical steroids (see DOSAGE AND ADMINISTRATION).

Once absorbed through the skin, topical contoosteroids enter pharmacokinetic pathways similarly to systemically administered contoosteroids. Contoosteroids are bound to plasma proteins in varying degrees. Conticosteroids are metabolized primarily in the liver and are then excreted by the kidneys. Some of the topical conticosteroids, including clobetasol proplonate and its metabolites, are also excreted into the bile.

Following repeated nonocclusive application in the treatment of scalp psoriasis, there is some evidence that clobetasol propionals topical solution has the potential to depress plasma cort-sol levels in some patients. However, hypothalamic-pituitary-edirenal (HPA) axis effects produced by systemically absorbed clobetzsol propionate have been shown to be transient and reversible upon completion of a two-week course of treatment.

INDICATIONS AND USAGE: Clobetasol propionate topical solution is indicated for short-term topical treatment of inflammatory and pruntic manifestations of moderate to severe conticos-teroid-responsive dermatoses of the scalp. Treatment beyond 2 consecutive weeks is not recommended, and the total dosage should not exceed 50 ml, per week because of the potential for the drug to suppress the HPA axis.

This product is not recommended for use in children under 12 years of age.

CONTRAINDICATIONS: Clobetasol propionate topical solution is contraindicated in patients with primary infections of the scalp, or in patients who are hypersensitive to clobetasol propionate, other conticosteroids, or any ingredient in this preparation.

General: Clobetasol propionets is a highly potent topical corticosteroid that has been shown to suppress the HPA axis at doese as low as 2 g (of ointment) per day. Systemic absorption of topical corticosteroids has resulted in reversible HPA axis suppression, manifestations of Cushing's syndrome, hyperglycemia, and glucosuria in some patients.

Conditions that augment systemic absorption include the application of the more potent con-ticostaroids, use over large surface areas, prolonged use, and the addition of occlusive dressings: Thersions, patients receiving a large dose of a potent topical steroid applied to a large sur-lace area should be evaluated periodically for evidence of HPA axis suppression by using the urinary free contact and ACTH stimulation tests. If HPA axis suppression is noted, an attempt should be made to withdraw the drug, to reduce the frequency of application, or to substitute a

Recovery of HPA axis function is generally prompt and complete upon discontinuation of the drug, Infrequently, signs and symptoms of steroid withdrawal may occur, requiring supplemental systemic contoosteroids.

Children may absorb proportionally larger amounts of topical conticosteroids and thus be more susceptible to systemic toxicity (see PRECAUTIONS: Pediatric Use).

Il initiation develops, topical conticosteroids should be discontinued and appropriate therapy instituted. Initiation is possible if clobatised propionate topical solution contacts the eye. If that

should occur, immediate flushing of the eye with a large volume of water is recommended.

If the inflammatory lesion becomes infected, the use of an appropriate antifungal or antibacterial agent should be instituted. If a lavorable response does not occur promptly, the contoce-teroid should be discontinued until the infection has been adequately controlled.

Although diobetasol propionate topical solution is intended for the treatment of inflammators conditions of the scalp, it should be noted that certain areas of the body, such as the face, groin, and axiliae, are more prone to atrophic changes than other areas of the body following treat-ment with corticosteroids. Frequent observation of the patient is important if these areas are to

As with other potent topical corticosteroids, clobetasol propionate topical solution should not be used in the treatment of rosacea and perioral dermatitis. Topical corticosteroids in general should not be used in the treatment of acre or as sole therapy in widespread plaque psoriesis Information for Patients: Patients using clobetasol propionate topical solution should receive

- the following information and instructions:

 1. This medication is to be used as directed by the physician and should not be used longer than the prescribed time period. It is for external use only, Avoid contact with the eyes.

 2. This medication should not be used for any disorder other than that for which it was pre-
- scribed.
- 3. The treated skin area should not be bandaged or otherwise covered or wrapped so as to be
- 4. Patients should report any signs of local adverse reactions to the physician.
- Laboratory Tests: The following tests may be helpful in evaluating HPA axis suppression: Urinary free cortisol test

ACTH stimulation test

Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term animal studies have not been performed to evaluate the carcinogenic potential or the effect on fertility of topical corticosternida

Studies to determine mutagenicity with prednisolone have revealed negative results.

Pregnancy: Teratogenic Effects: Pregnancy Category C: The more potent cordicostaroids have been shown to be teratogenic in animals after dermal application. Clobetasol propionate has not been tested for teratogenicity by this route; however, it is absorbed percutaneously, and when administered subcutaneously it was a significant teratogen in both the rabbit and the mouse. Clobetasol propionate has greater teratogenic potential than steroids that are less potent.

There are no adequate and well-controlled studies of the teratogenic effects of topically applied conticosteroide, including clobetasol, in pregnant women. Therefore clobetasol and other topical conticosteroids should be used during pregnancy only if the potential benefit justi-fies the potential risk to the fetus, and they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time.

Nursing Mothers: It is not known whether topical administration of conticosteroids could result

in sufficient systemic absorption to produce detectable quantities in breast milk. Systemically administered confocateoids are secreted into breast milk in quantities not likely to have a deleterious effect on the infant. Nevertheless, caution should be exercised when topical corticosteroids are prescribed for a nursing woman.

Pediatric Use: Use of clobetasol propionate topical solution in children under 12 years of age

latric patients may demonstrate greater susceptibility to topical corticosteroidinduced HPA axis suppression and Cushing's syndrome than mature patients because of a larger skin surface area to body weight ratio.

HPA axis suppression, Cushing's syndrome, and intracranial hypertension have been reported in children receiving topical conticosteroids. Manifestations of adrenal suppression in children include linear growth retardation, delayed weight gain, low plasma cortisol levels, and absence of response to ACTH stimutation. Manifestations of intracranial hypertension include buiging fontanelles, headsches, and bilateral papilledema

ADVERSE REACTIONS: Clobetasol propionate topical solution is generally well tolerated when

used for 2-week treatment periods.

The most frequent adverse events reported for clobetasol propionate topical solution have been local and have included burning and/or stinging sensation, which occurred in approxi-mately 10% of the patients; scalp pustules, which occurred in approximately 1% of the patients; and tingling and folloulitis, each of which occurred in 0.7% of the patients. Less frequent adverse events were litching and tightness of the scalp, dermatitie, tendemess, headloss, and eve irritation

The following local edverse reactions are reported infrequently when topical corticosteroic are used as recommended. These reactions are listed in an approximately decreasing order of occurrence: burning, litching, irritation, dryness, folliculitis, hypertrichosis, acnellorm eruptions, hypopigmentation, perioral dermatitis, allergic contact dermatitis, maceration of the skin, secondary infection, skin atrophy, striae, and miliaria. Systemic absorption of topical conticosteroids has produced reversible HPA axis suppression, manifestations of Cushing's syndrome, hyper-glycemia, and glucosuria in some patients, in rare instances, treatment (or withdraws) of treatment) of psortasis with corticosteroids is thought to have exacerbated the disease or provoked the pushdar form of the disease, so careful patient supervision is recommended.

OVERDOSAGE: Topically applied clobetasol propionate solution can be absorbed in sufficient amounts to produce systemic effects (see PRECAUTIONS).

DOSAGE AND ADMINISTRATION: Clobetasol Propionate Topical Solution USP, 0.05% should be applied to the affected scalp areas twice daily, once in the moming and once at night.

Clobetasol propionate topical solution is potent, therefore, treatment must be limited to 2.

consecutive weeks, and amounts greater than 50 mL per week should not be used.

Clobetseel propionate topical solution is not to be used with occlusive dressings

HOW SUPPLIED: Clobetasol Propionate Topical Solution USP, 0.05% is supplied in plastic smileste bottlee, 25 ml, and 50 ml.

Store in tight containers. Store at controlled room temperature 15'-30' (59'-85'F). Do not refrigerate. Do not use near an open flame.

Mfd. by: Taro Pharmaceuticals Inc., Bramaiea, Ontario L6T 1C3 Issued: February 1998

PK-2508-0